

U. S. Environmental Protection Agency

FACT SHEET

Barite Hill/Nevada Goldfields McCormick, SC

No. 2

September 2011

This site information sheet summarizes the history of the site, activities presently underway at the Site, and future activities planned for the Site.

If you have questions or comments about the Site, please contact us at the numbers listed below:

Contact Info:

U.S. EPA

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South Carolina Department of Health and Environmental Control (DHEC)

2600 Bull Street Columbia, SC 29201

Charles Williams (803) 896-4162

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DHEC Greenwood Office (local) (864) 223-0333

Site History

The Barite Hill/Nevada Goldfields Site (the Site) is located approximately three miles south of McCormick, South Carolina between US 378 and US 221 in McCormick County, South Carolina. The Site actively mined gold using a cyanide heap leach process, from 1991 to 1995. From 1995 until Nevada Goldfields filed for chapter 7 Bankruptcy in 1999, the reclamation of the Site was being addressed by Nevada Goldfields. On July 7, 1999, Nevada Goldfields handed the facility's keys to the South Carolina Department of Health and Environmental Conservation (SCDHEC) and abandoned the Site. The permitted mine site totals 795.2 acres. Of this total, 659.7 acres are designated as buffer area, therefore, the area of concern is 135.5 acres.

Removal Action

EPA conducted an Emergency Response at the site to address the immediate danger. These activities included the demolition of a furnace building and onsite neutralization of over 2000 lbs of varying strength acids and bases. In September 2007, the Agency approved an Action Memorandum to conduct a Removal Action. The Removal Action began October 2007 and included a Bureau of Reclamation designed cap for approximately 250,000 cubic yards of acid producing waste rock adjacent to the Main Pit, neutralization of water in the Main Pit and cyanide deactivation in one of the onsite process ponds.

Current Activities

Following the Removal Action, EPA contracted with the Department of Energy Idaho National Laboratory (INL) to install and operate a remote monitoring system in the Main Pit and electric resistivity on the Bureau of Reclamation designed cap. This system monitors basic water quality parameters including, pH, oxidation reduction potential (ORP), dissolved oxygen (DO), and others. This system is maintained by both EPA and INL. In addition to monitoring water quality in the Main Pit and under the capped waste rock, EPA began Remedial Investigation (RI) activities at the site in February 2011. As part of the Remedial Investigation, quarterly groundwater sampling is being conducted at the site. In May 2011, EPA collected soil, sediment, surface water and groundwater samples. EPA, SCDHEC and the Agency for Toxic Substance and Disease Registry (ATSDR) conducted a public availability session on July 14, 2011, followed by additional RI activities at the site including a geophysical investigation and private well sampling in September 2011.

Upcoming Activities

The next quarterly groundwater sampling event will be conducted November 2011. Remedial Investigation activities, site characterization, and sampling will continue at the site and is anticipated to be complete by December 2012.



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The permitted mine site totals 795.2 acres. Of this total, 659.7 acres are designated as buffer area, therefore, the area of concern is 135.5 acres.

The facility used a cyanide solution in a heap leach process to extract gold from ore.

Removal Action

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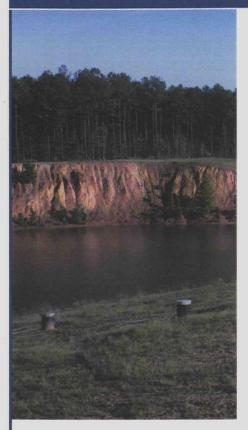
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Upcoming Activities

Remedial Investigation activities, site characterization, and sampling will continue at the site and is anticipated to be complete by December 2012.

Barite Hill/Nevada Goldfields Site



Background/Introduction

The Barite Hill Site (also known as the Nevada Goldfields Site) is located about 3 miles southwest of McCormick, South Carolina. The site was mined for gold from 1991 to 1995. Mining resulted in a 17-acre open pit mine, called the Main Pit, which contains millions of gallons of water. The water had high acidity and high dissolved metals before water treatment started in 2008. ATSDR is involved with the Barite Hill Site because it is a U.S. Environmental Protection Agency (EPA) National Priorities List (NPL) hazardous waste site. Congress mandates that ATSDR conduct public health activities at these sites.

Findings of the Public Health Assessment

ATSDR examined whether chemicals associated with past gold-mining activities at the site could harm the health of community members. They found that:

- Swimming in the Main Pit is unlikely to cause long-term health problems, including cancer and non-cancer health effects from past or current chemical exposures. Before the pit was treated for high acidity in 2008, swimming there might have caused skin and eye irritation. Swimming in the pit is illegal and is not recommended.
- Residents near the site receive their drinking water from the public water supply which is monitored routinely to make sure it meets federal drinking water standards. Private wells in the area are more than 2 miles from the site and are not likely to have been affected by site activities. EPA is testing groundwater to understand the conditions in the area.
- Because Hawe Creek and its tributaries are far away and shallow, people are not likely swim there.
- Not enough information exists to determine whether eating fish from Hawe Creek or nearby tributaries could cause harm. ATSDR recommends that EPA collect information regarding fishing activities of the community. Many physical hazards exist on the site and trespassing is illegal.
- Not enough information is available to know whether chemicals that may
 be present in the soil on the site could harm people who trespass on the
 site on foot or all-terrain vehicles.

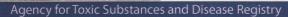
To Read the Complete Public Health Assessment

- Go to the ATSDR's website at: http://www.atsdr.cdc.gov/HAC/PHA/ HCPHA.asp?State=SC
- Visit the McCormick County Library, 201 Railroad Avenue, McCormick, SC 29835, (phone 864-852-2821) and ask to review the library copy.
- Contact ATSDR Environmental Health Scientist, Annmarie DePasquale, at 770-488-0766 or and6@cdc.gov.

ATSDR's Next Steps

Currently, EPA is collecting information to better understand the chemicals present at the site. ATSDR will continue to work with EPA to determine whether chemicals from this site may pose health concerns for people who may come into contact with them. ATSDR may prepare additional assessments in the future.

For additional Information, please visit ATSDR's website at http://www.atsdr.cdc. gov or call ATSDR's hotline at 1-(800) 232-4636. You may also directly contact ATSDR's Lead Health Assessor for the Barite Hill Site, Annmarie DePasquale, at 770-488-0766 or and6@cdc.gov.



Division of Health Assessment and Consultation

